

Alternative Mail Survey for Nonrespondents of the 1998 Michigan Behavioral Risk Factor Survey (MI BRFS)

TN McCainey*, A Rafferty*, ML Cook*, L Hembroff^, D Rusz^

Background

- Since the early 1990s, telephone survey response rates both in Michigan for the MI BRFS, and nationally, have consistently decreased.
- To examine the utility of supplementing the telephone survey, mail surveys were sent to capture information from nonrespondents.
- The Michigan BRFS, a component of the national BRFSS, is a telephone survey that uses a list-assisted, random-digit dialing methodology.
- Nonrespondents and respondents unable to complete a phone survey were invited to complete a mail survey, which included selected questions from the 1998 MI BRFS instrument.

Objective

- To compare demographic and health-related characteristics of nonrespondents of the 1998 MI BRFS who were willing to complete an alternative survey to those of who completed the telephone survey.

Methods

- Respondents for the telephone survey were selected by a list-assisted, random-digit dialing methodology and conducted according to the telephone survey protocol for the BRFSS, developed by the CDC.
- The protocol for respondent eligibility for the mail survey is shown in the flowchart below.

The respondent must have initially been chosen to participate in the telephone survey as well as one of the following:

- The respondent has a physical condition that prevents them from completing an interview over the telephone.
- There is a language barrier that makes it difficult to do a telephone interview, but the respondent can read a questionnaire.
- Respondent is gone for the duration of the study.
- After 2nd refusal, respondent specifically states that they will not complete the phone survey, but voluntarily states they will complete it by mail.
- If a respondent is difficult to reach due to their schedule and 10 attempts have been made since 1st attempt of contact.
- If someone at the residence refused for a second time.

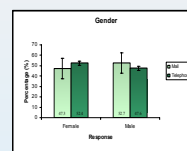
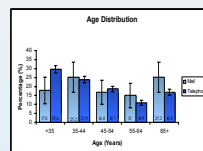
- Telephone survey data were weighted and a post-stratification weighting factor was applied that adjusted for age, sex, and race using the 1997 Michigan intercensal population distributions.
- Mail survey data were adjusted for age and sex using the 1997 Michigan intercensal population distributions.

Results

- A total of 215 mail surveys were distributed with a response rate of 50.7%.
- Of 15,850 telephone numbers randomly selected, 2613 of those participated in the telephone interview.
- The CASRO response rate, which takes into account final dispositions (e.g., non-working numbers, busy numbers, businesses, etc.), was 48.1% for the telephone survey.

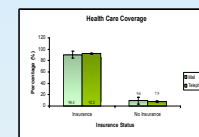
Demographic Characteristics

- The mean age of mail survey respondents was 51.9 years and 45.4 years for telephone survey respondents.
- Although both surveys had similar mean ages, 40.6% of mail survey participants were 55 years or older compared to 27.8% of telephone survey participants.
- 52.7% of respondents in the mail survey were men compared to 47.6% in the telephone survey; moreover, the mail survey had disproportionately more white respondents than the telephone survey.
- Those responding to the surveys were similar in regard to educational attainment and income.

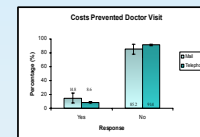


Health-Related Characteristics

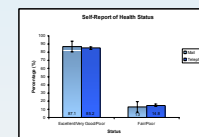
- Those participating in the mail and telephone survey were similar relative to health characteristics.
- The majority of mail and telephone respondents reported having some form of health care coverage (90.4% and 92.2%, respectively); conversely, few stated that costs prevented them from seeing a doctor when they needed to (14.8% and 8.6%, respectively).
- Although most respondents reported being a non-smoker, over 1/4 of those surveyed from the mail and telephone survey were current smokers (29.7% and 27.4%, respectively).
- Most respondents from the mail and telephone survey reported having had a check-up in the past year, however, there were still 1/4 of those surveyed from each group who did not have a check-up in the past year.
- Less than half of mail and telephone survey participants engaged in an adequate amount of physical activity (38.6% and 45.2%, respectively) and more than half were considered overweight or obese.



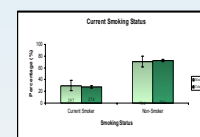
MI BRFS Question: "Do you have any kind of health care coverage, including health insurance, prepaid plans such as HMOs, or government plans such as Medicare?"



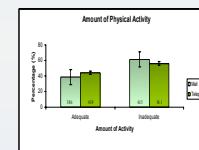
MI BRFS Question: "Was there a time during the last 12 months when you needed to see a doctor, but could not because of the cost?"



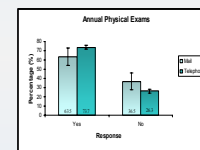
MI BRFS Question: "Would you say that in general health is...?"



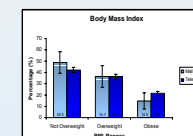
Current Status: Smoked at least 100 cigarettes in a lifetime and now smokes cigarettes everyday or some days.



Adequate: >30 minutes 5 times a week of moderate activity or >20 minutes, 3 times a week of vigorous activity



MI BRFS Question: "About how long has it been since you last visited a doctor for a routine check-up?"



Not Overweight: BMI <25.0
Overweight: BMI 25.0-29.9
Obese: BMI ≥30.0

Conclusions

- Respondents of the mail survey and those of the telephone survey differed slightly by age and greatly by race, but overall, were similar in regard to gender, education, income, and health-related characteristics.
- Although response rates have decreased over time, the telephone survey still appears to be a tool that adequately conveys the health status of Michigan residents.
- Mail surveys may be used intermittently to determine the accuracy of estimates from the telephone survey.

ACRONYMS
BMI Body Mass Index
BRFS Behavioral Risk Factor Survey
BRFSS Behavioral Risk Factor Surveillance System
CDC Centers for Disease Control and Prevention
CSTE Council for State and Territorial Epidemiologists
MDCH Michigan Department of Community Health
MSU Michigan State University*



Michigan Department
Of Community Health
MDCH